5

10

15

ABSTRACT OF THE DISCLOSURE

The present invention provides novel polynucleotides encoding HGRA4 polypeptides, fragments and homologues thereof. The present invention also provides novel polynucleotides encoding a HGRA4 splice variant, HGRA4sv. Also provided are vectors, host cells, antibodies, and recombinant and synthetic methods for producing said polypeptides. The invention further relates to diagnostic and therapeutic methods for applying these novel HGRA4 and HGRA4sv polypeptides to the diagnosis, treatment, and/or prevention of various diseases and/or disorders related to these polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of the polynucleotides and polypeptides of the present invention.